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EXAMINER

NGUYEN, KIET TUAN

ART UNIT PAPER NUMBER

2881

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,676

Applicant(s)

KOZLOWSKI, HENRY

Examiner

Kiet T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 26-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050102.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Applicant's election with traverse of Group I including claims 1-19 and 26-45 in the reply filed on 26 October 2004 is acknowledged. The traversal is on the ground(s) that the group I links the inventions of groups I and II. This is not found persuasive because the Groups I, II and III recite different limitations.

The requirement is still deemed proper and is therefore made FINAL.

Objected Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electrodeless lamp and the high frequency coupler as recited in claim 7; the power supply connected to the frame and configured to be in contact with a fluid as recited in claim 26; the container for a cooling liquid as recited in claim 29; the container being remote from the module as recited in claim 30; the container attached to the module as recited in claim 31; a portion of the container comprising the cooling liquid being submersible in the fluid being treated as recited in claim 32; at least one radiation source cantilevered from the first support member as recited in claim 34; the power supply interposed between the support member and the radiation source as recited in claim 35; an individual power supply provided for each radiation source in the module as recited in claim 36; an individual power supply provided for each pair of radiation sources in the radiation source assembly as recited in claim 37; an individual power supply provided for a plurality of radiation sources in the radiation source assembly as recited in claim 38; the power supply connected to the connection means and a portion of the power supply immersed in a fluid as recited in claim 39; the power supply disposed within a portion of

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the frame as recited in claim 42; the power supply connected to an exterior of the frame as recited in claim 43; and the power supply connected to the frame and contacted with a fluid, and a portion of the power supply contacted with a dielectric cooling liquid as recited in claim 45 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Rejection Under 35 U.S.C. 112, Second Paragraph

Claims 11, 13-15 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation "the first elongate frame member" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the tubular elongate frame member" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the ballast" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Rejection Under 35 U.S.C. 112, First Paragraph

Claims 26-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification is completely silent for reciting the limitations "the power supply connected to the frame and configured to be in contact with a fluid" as recited in claim 26; "the container for a cooling liquid" as recited in claim 29; "the container being remote from the module" as recited in claim 30; "the container attached to the module" as recited in claim 31; "a portion of the container comprising the cooling liquid being submersible in the fluid being treated" as recited in claim 32; "at least one radiation

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source cantilevered from the first support member” as recited in claim 34; “the power supply interposed between the support member and the radiation source” as recited in claim 35; “an individual power supply provided for each radiation source in the module” as recited in claim 36; “an individual power supply provided for each pair of radiation sources in the radiation source assembly” as recited in claim 37; “an individual power supply provided for a plurality of radiation sources in the radiation source assembly” as recited in claim 38; “the power supply connected to the connection means and a portion of the power supply immersed in a fluid” as recited in claim 39; “the power supply disposed within a portion of the frame” as recited in claim 42; “the power supply connected to an exterior of the frame” as recited in claim 43; and “the power supply connected to the frame and contacted with a fluid, and a portion of the power supply contacted with a dielectric cooling liquid” as recited in claim 45. Therefore, the examiner don’t understand how is the radiation source module made to be a unit without the power supply connected to the frame, contacted with the liquid for cooling the power supply and operated for individual, pair and/or plurality of the radiation sources? How is the radiation source module positioned relative to the liquid container for treating the liquid?

Additional explanations are needed if applicant insists on including these features in the claims 26-45 without the insertion of new matter.

Clarification without the introduction of new matter is required.

Rejection Under 35 U.S.C. 103(a)

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ifill et al. (5,019,256).

Ifill et al. (5,019,256) disclose, in figs. 1-10, a UV lamp rack assembly used in a liquid of a wastewater treatment system, which includes a plurality of UV elongate lamps 17 having electrodes 27 and enclosed in transparent sleeves 24; a plurality of elongate members 10, each including first and second supports for supporting the UV lamps 17, and a connection means 11; controlling means which are ballasts housed in a conduit 15 of the member 10 (see col. 6, lines 58-64); electrical conducting means 18 and 19 for providing electrical energy to the controlling means; and means 16 and 31-37 for sealing the UV lamp and ballast in the conduit 15 against direct contact with the liquid.

It is noted that a gas in a radiation source as recited in claims 1, 4 and 16; and an electrodeless lamp and a high frequency coupler as recited in claim 7 are not disclosed in the Ifill et al. (5,019,256).

Using the radiation source having a gas therein such as an electrodeless lamp and the high frequency coupler for operating the lamp is considered to be obvious variation in design, since it well known in the art to use the gas discharge radiation source such as the electrodeless lamp and the high frequency coupler for operating the

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lamp to provide the UV rays, as applicant admitted in page 2, lines 3-8, thus would have been obvious to one skilled in the art use the gas discharge radiation source such as the electrodeless lamp and the high frequency coupler in the Ifill et al. (5,019,256) for providing the UV rays.

Claims 11 and 13-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Reasons for indicating allowable subject matter

The prior art fails to disclose a radiation source assembly for use in a fluid, which includes an elongate ballast having a first end mounted on a portion of an elongate frame member and a second opposed end connected to a first end of an elongate lamp as recited in claim 11.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Schuerch et al. (5,332,388) disclose UV modules used in a liquid ; and
- 2) Parra (6,144,175) discloses gas discharge lamps used in a liquid.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet T. Nguyen whose telephone number is 571-272-2479. The examiner can normally be reached on Monday-Friday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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KIET T. NGUYEN
PRIMARY EXAMINER